



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,953	08/22/2003	Vipin Samar	OR03-10201	8253

51067 7590 12/29/2006
ORACLE INTERNATIONAL CORPORATION
c/o PARK, VAUGHAN & FLEMING LLP
2820 FIFTH STREET
DAVIS, CA 95618-7759

EXAMINER

ROSE, HELENE ROBERTA

ART UNIT	PAPER NUMBER
----------	--------------

2163

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,953	SAMAR, VIPIN	
	Examiner	Art Unit	
	Helene Rose	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-14,16-22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 7,15,23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-14,16-22 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/22/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/17/05&1/30/06</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2163

Detailed Action

1. This communication is responsive to the Request for continued Examination entered on 11/13/2006.
2. Claims 1 and 17 have been amended. Claims 7, 15, and 23 have been cancelled. No claims have been added.

Information Disclosure Statement

3. The information disclosure statement filed on 5/17/2005; and 5/26/2006 has been considered. However, "2002/169,793" cited under Patent No is incorrectly cited, wherein it should be cited as "2002/0169793. The Information Disclosure has been placed in the application file to reflect the changes; therefore the appropriate correction is required to reflect the appropriate change.

Claim Rejections 35 U.S.C 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8-14, 16-22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheussler et al (US Patent No. 6,366,950/Date of Patent April 2, 2002, hereinafter Scheussler) in view of Robbins et al (US Patent No. 7,062,650, Date Filed: September 28, 2001, hereinafter Robbins).

Art Unit: 2163

Claims 1, 9 and 17:

Regarding Claims 1, 9 and 17, discloses a method, a computer-readable storage medium, and an apparatus utilizing the same functionalities. Scheussler teaches a method, a computer-readable storage medium an apparatus for protecting an item of private information in a database (Figure 3, all features, wherein the identification number, user, email, and authentication are all within the database, Scheussler), wherein the item of private information is used as a key (Figure 3, diagram 32A and diagram 32D, wherein an index is a sequence of key pointers pairs where each pointer points to a record in the database that contains the key value in a particular field, column 10, lines 13-22, wherein the index is sorted on the key values to allow rapid searching for a particular key value, Scheussler), for retrieving data from the database (column 10, lines 29-32, wherein retrieve the ID number from the processor and prepares a message to be sent to the server, wherein the server includes the identification database defined in Figure 2, Scheussler) comprising:

a receiving mechanism configured to receive the item of private information (column 6, lines 58-59, wherein the computer receives the email message, column 2, lines 35-37, wherein the client module that generates the message includes identification number, column 2, line 37, wherein the client computer includes a client module generates a message and sends the message over the communications medium, and column 6, lines 58-59, wherein the computer receives a email message, Scheussler);

Scheussler discloses all the limitations above, as well a hashing mechanism (column 5, lines 44-46, wherein the hasher software is defined, Scheussler). However, Scheussler is silent with respect to:

creating a hash of the item of private information at a database, wherein **creating the hash further comprises checking a column attribute for a column in the database to determine**

Art Unit: 2163

that “privacy” is enabled for the column and only upon privacy being enabled for the column and creating the hash. On the other hand, Robbins discloses:

creating a hash of the item of private information at a database (column 4, lines 46-50, wherein the user attributes are those that can be added by the user when creating the signed binary description file, i.e. SBDF, such as a hash algorithm type; and column 10, lines 13-16, wherein the number of songs with their audio frames encrypted may be stored in the client database along with the verification agent relationships the content license and the single binary description file; and column 8, lines 61-64, wherein relationship between each song and each verification agent along with the content license and signed binary description file, i.e. SBDF, are stored in a database at the client side, Robbins), **wherein creating the hash further comprises checking a column attribute for a column in the database to determine that “privacy” is enabled for the column** (columns 1-2, lines 58-67, wherein providing signature and verification of closely related components is to use multiple binary description files for each component, wherein before the action of each object component is to be performed, information needed for verification and other operation is extracted from its corresponding binary description file, wherein a verification agent needs to verify different object components that are part of a group that is to carry out a certain function for the system, the verification agent has to parse a multitude of binary description file, Robbins), **and only upon privacy being enabled for the column** (column 3, lines 8-11 and lines 25-27, wherein each of the object components that needs to be signed and verified are associated with a unique identification name corresponding component license information which allows an object to be verified and wherein verifications undertaken before the object component is allowed to carry out its service, and column 4, lines 38-45, wherein the associated hash of the plugin module P1 and the related information may be signed using a private manufacture key creating a digital

Art Unit: 2163

signature, wherein the digital signature is associated with the unique ID name of the plug-in module p1 and so forth, Robbins), **and creating the hash** (column 4, lines 46-50, wherein the user attributes are those that can be added by the user when creating the signed binary description file, i.e. SBDF, such as a hash algorithm type, the plug-in module P1 type and some information unnecessary for validating the plug-in module P1, Robbins); and

a storage mechanism configured to store the hash of the item of private information in **the** database (column 11, lines 37-43, wherein for the related object components may be hashed or encrypted before they are stored in a common SBDF, Robbins).

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to create and store hash in at a database, as disclosed by Robbins, within Scheussler system.

A skilled artisan would have been motivated to do so for establishing an improved method by implementing security and verifying the integrity of a system.

Claims 2,10, and 18:

Regarding claims 2,10, and 18, the combination of Scheussler in view of Robbins teaches wherein creating the hash can include creating **at least one of a Secure Hash Algorithm-1 and a Message-Digest Algorithm 5** (MD5) hash the hashing mechanism is configured to use SHA-1 or MD5 hashing functions (column 10, lines 1-5, wherein the field 32B has a size of 128 bits, the ID number has a size of 44 bits, wherein fixed length is interpreted to be message digest 5, column 11, lines 46-48, wherein authenticating procedure, column 5, lines 57-67, wherein packet addressing, handshaking is defined to be message digest for the reason that it authenticate packet data and

Art Unit: 2163

column 11, lines 4-8, wherein the computer applies a hash function to the id number to convert it to a first hash id number, Scheussler¹).

Claims 3,11, and 19:

Regarding claims 3,11, and 19, the combination of Scheussler in view of Robbins teaches wherein the hashing mechanism is internal to the database (see Figure 1, diagrams 2 & 4, column 5, lines 40-45, wherein each computer 2, 4 has appropriate application and communications software modules, wherein the software modules include, Internet access software, cable modem software, two-way communications software, point-to-point software, the hasher software, software to retrieve and process the ID number from the identification module 8, Scheussler) and is transparent to an application (column 6, lines 21-29, wherein transparent is interpret to be a computer operation that does not require user intervention, in which a user is unaware that it is taking place) which manipulates the private information (column 6, lines 43-48, wherein communications software automatically converts the email into an appropriate electronic format, Scheussler).

Claims 4,12, and 20:

Regarding claims 4,12, and 20, the combination of Scheussler in view of Robbins teaches a query mechanism (column 9, lines 2-3) configured to perform queries containing the private information (column 9, lines 7-13, wherein recursive query expressions, wherein recursive is defined to be a program or task that can repeat itself indefinitely, Scheussler), wherein the query mechanism is configured to:

¹ The examiner interpret the MD5 to be wherein the field 32B has a size of 128 bits, the ID number has a size of 44 bits, correspond to the MD5 claimed since MD5 is defined to be a message digest that is a widely-used cryptographic has function with a 128-bit hash value, and as a internet standard MD5 has been employed in a wide variety of security applications, and it also commonly used to check the integrity of files (column 12, lines 17-29, Scheussler).

Art Unit: 2163

receive the item of private information (column 6, lines 58-59, wherein the computer receives the email message; column 2, lines 35-37, wherein the client module that generates the message includes identification number; column 2, line 37, wherein sending the message over the communications medium; and column 6, lines 58-59, wherein the computer receives a email message, Scheussler);

create a hash (Refer to claim 1, wherein this limitation is substantially the same/or similar, Robbins); and

query the database using the hash of the item of private information (column 8, lines 66-67, Scheussler).

Claims 5,13, and 21:

Regarding claims 5, 13, and 21, the combination of Scheussler in view of Robbins teaches wherein the item of private information can include one of:

a social security number;

a driver's license number;

a passport number;

an email address (Figure 4, diagram 202 and column 6, lines 27-29, Scheussler²);

a person's name; and

a person's mother's maiden name.

Claims 6,14, and 22:

Regarding claims 6,14, and 22, the combination of Scheussler in view of Robbins teaches wherein the hashing mechanism can be further configured to combine multiple items of private

² The examiner notes that claims 5,13, and 21 does not require full examination of all claim limitations since the claims simply states wherein the item private information can include one of the following. Therefore, only one limitation was made reference to.

Art Unit: 2163

information prior to creating the hash (columns 8-9, lines 64-67 and lines 1-5, wherein contain the hash of the component binary private and or public keys associated with the component callback information and other attributes, Robbins).

Claims 8,16, and 24:

Regarding claims 8,16, and 24 the combination of Scheussler in view of Robbins teaches wherein the database is a Lightweight Directory Access Protocol (LDAP) database (column 9, lines 45-51, wherein LDAP directory entries are arranged in a hierarchical structure that reflects political, geographic, organizational boundaries, while entries representing countries appear at the top of the tree while other entries in the tree represent states or national organizations; and below them there may be entries representing people, organizational units, printers, documents, wherein the database is lightweight is defined to be the tree representing the directory information tree, known as DIT, to be a distributed LDAP database that can be hosted by more than one server, Schuessler).

Prior Art of Record

(The prior art made of record and not relied upon is considered pertinent to applicant's disclosure)

1. Scheussler et al (US Patent No. 6,366,950) discloses a communications network includes several computers connected to a communications medium, wherein a client computer has a unique identification number that is embedded within a processor.
2. Balogh (US Publication No. 2003/0084039) discloses a method and system for processing query messages over a network.
3. Robbins et al. (US Patent No. 7,062,650) disclose a system and method for verifying integrity of a system with multiple components includes a plurality of related object components that forms the software system, a signed binary description file manager that generates a signed binary description

Art Unit: 2163

file (SBDF) to store verification and license information of the plurality of related object components, and a verification agent that verifies itself and the plurality of related object components.

4. Maples et al (US Patent No. 6,167,443) disclose a shared multi-user communication system allows a group of users to explore, navigate, manipulate, and examine application data in a multi-dimensional synthetic environment.

Examiner Response to Arguments

Applicant's arguments filed on 11/13/2006, with respect to the rejected claims in view of the cited references have been considered but are moot in view of applicant's amended claims necessitate new ground(s) of rejection.

Point of Contact

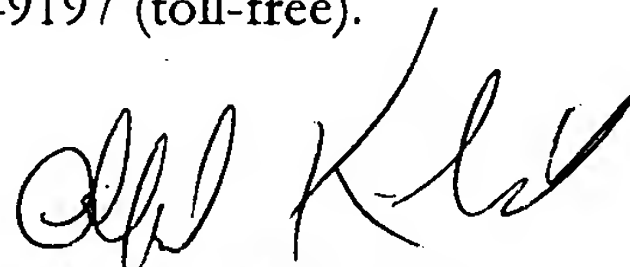
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene R. Rose whose telephone number is (571) 272-0749. The examiner can normally be reached on 8:00am - 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2163

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HRR
Technology Center 2100
December 19, 2006



ALFORD KINDRED
PRIMARY EXAMINER